

# Appendices

## **Appendix A: A cautionary note on comparisons of foreign direct investment**

Comparisons of foreign direct investment (FDI) should be regarded with great caution. Some argue that they should not be used at all due to significantly differing methodologies. An analysis of methodological problems suggests that overall comparisons are, at a minimum, less useful than measurements of the trends — which in most data sources show recent Japanese investment increasing at a rapid rate while U.S. investment in the Asia-Pacific region has been relatively stagnant during the past decade, especially as measured in constant dollars.

Japanese FDI data is based on notifications to the Japanese Government of intent to carry out investment approved by the host government, whereas U.S. data from the Department of Commerce's *Survey of Current Business* is based on estimated capital flows and equity positions of U.S. firms and foreign affiliates. Thus Japanese data tends to be anticipatory and the methodology tends to overstate Japanese investment when compared to U.S. investment as measured by the more conservative U.S. method. Host government estimates, which often are based on approvals of proposed investment, tend to overstate both Japanese and U.S. investment.

In what is probably an extreme case of understating U.S. investment compared with Japanese FDI, the U.S. Commerce Department valued

U.S. investment in the People's Republic of China (PRC) as of 1988 at only US\$310 million, versus US\$2.6 billion in approved investment estimated by the Chinese Government. (Recent disinvestment in China has brought U.S. equity down to under US\$300 million.) On the other hand, the Japanese Ministry of Finance estimate of US\$2 billion in cumulative notified Japanese FDI as of 31 March 1989 is nearly the same as the Chinese estimate of US\$2.1 billion.

Recipient countries vary widely in how they track foreign investment. Hong Kong doesn't keep overall data on foreign investment but conducts an annual voluntary survey on manufacturing investment — by admission an incomplete and imprecise process. The U.S. *Survey of Current Business* shows US\$594 million invested in *manufacturing* in Hong Kong as of 1988, versus an original cost estimate of US\$1.1 billion shown by the Hong Kong Government's annual report. Japanese data similarly underestimates investment by about half compared to the Hong Kong survey data — i.e. Japanese Ministry of Finance data shows US\$0.5 billion invested in manufacturing in Hong Kong as of 1988 versus US\$0.9 billion estimated by the Hong Kong Government.

While it may be safe to assume that the PRC and Hong Kong are atypical cases, individual country data tends to underscore the fact that if U.S. and Japanese cumulative investment were measured on the same basis, they would be somewhat closer to being equal. In terms of new investment, it seems much clearer that Japan is outdistancing the United States, though the extent of the gap is open to argument.

For a particularly scathing attack on FDI comparisons, see a paper by Eric D. Ramstetter of Kansai University, Osaka, "An Overview of Multinational Firms in Asia-Pacific Developing Economies: An Introduction to the Commonplace Ignorance", prepared for the Asian Productivity Organization/Institute for Economic Development and Policy Seminar on the Role of Foreign Direct Investment in Development, held in Seoul, Korea, 16–20 September 1991.

**Appendix B**  
**Japanese trade with Asia-Pacific countries, 1986-90**  
(In US\$ millions)

	<i>Imports</i>					<i>Exports</i>								
	1986	1987	1988	1989	1990	% Change		1986	1987	1988	1989	1990	% Change	
						1986-90	1988-90						1986-90	1988-90
NIES	12,608	19,027	25,014	27,137	25,944	105.8	105.8	30,286	39,804	49,820	52,756	56,688	87.2	87.2
Hong Kong	1,080	1,577	2,111	2,215	2,172	101.1	101.1	7,214	8,947	11,708	11,528	13,080	81.3	81.3
Singapore	1,475	2,081	2,338	2,953	3,576	142.5	142.5	4,612	6,064	8,312	9,240	10,716	132.4	132.4
South Korea	5,334	8,172	11,827	12,997	11,712	119.6	119.6	10,558	13,344	15,443	16,565	17,460	65.4	65.4
Taiwan	4,720	7,198	8,738	8,969	8,484	79.8	79.8	7,902	11,449	14,357	15,422	15,432	95.3	95.3
ASEAN (4)	14,009	16,505	18,997	21,792	24,408	74.2	74.2	7,548	9,614	13,020	16,646	22,188	194.0	194.0
Indonesia	7,386	8,500	9,493	11,016	12,708	72.1	72.1	2,682	3,016	3,055	3,301	5,040	87.9	87.9
Malaysia	3,986	4,814	4,709	5,124	5,400	35.5	35.5	1,723	2,188	3,061	4,124	5,508	219.6	219.6
Philippines	1,235	1,375	2,041	2,063	2,148	74.0	74.0	1,098	1,429	1,740	2,381	2,508	128.4	128.4
Thailand	1,402	1,816	2,754	3,589	4,152	196.2	196.2	2,045	2,982	5,164	6,840	9,132	346.6	346.6
Non-Market	5,980	7,864	10,379	11,780	12,924	116.1	116.1	10,312	8,734	9,914	8,888	6,528	-36.7	-36.7
China (PRC)	5,726	7,478	9,860	11,140	12,024	110.0	110.0	9,936	8,336	9,482	8,522	6,132	-38.3	-38.3
North Korea	169	240	323	295	300	77.3	77.3	185	216	239	197	180	-2.6	-2.6
Vietnam	84	145	196	346	600	614.3	614.3	191	181	193	169	216	13.2	13.2
South Asia	1,664	2,042	2,359	2,563	2,616	57.2	57.2	3,030	2,921	3,209	3,047	2,712	-10.5	-10.5
India	1,309	1,546	1,806	1,974	2,076	58.6	58.6	2,119	1,976	2,083	2,018	1,704	-19.6	-19.6
Pakistan	355	497	553	589	540	52.0	52.0	911	944	1,126	1,028	1,008	10.7	10.7

**Appendix B (Continued)**

	Imports					Exports					% Change 1990 1986-90
	1986	1987	1988	1989	1990	1986	1987	1988	1989	1990	
Other Asia	1,578	1,388	1,471	1,458	1,632	1,247	1,111	1,069	1,087	1,164	-6.6
Oceania	8,429	9,718	12,780	14,167	14,748	7,066	6,919	8,368	9,974	8,964	26.9
Australia	7,046	7,974	10,285	11,566	12,324	5,274	5,196	6,684	7,806	6,900	30.8
New Zealand	964	1,180	1,645	1,658	1,728	1,114	1,138	1,040	1,348	1,212	8.8
Pacific Islands	419	564	850	943	696	678	586	643	821	852	25.7
Total	44,268	56,544	71,000	78,898	82,272	59,488	69,103	85,400	92,399	98,244	65.2
Asia-Pacific											
Reference Comparison											
U.S.	29,407	31,957	42,295	48,520	52,728	81,886	84,992	90,264	93,718	90,888	11.0
Canada	4,936	6,109	8,300	8,653	8,376	5,570	5,662	6,426	6,806	6,732	20.9
OECD-Europe	18,342	22,860	30,512	35,198	42,708	37,862	46,116	56,124	56,602	63,396	67.4

NOTE: Numbers may not add due to rounding.

SOURCE: OECD Monthly Statistics on Trade.

### Appendix C U.S. trade with Asia-Pacific countries, 1986-90 (In US\$ millions)

	Imports					Exports					% Change 1986-90	
	1986	1987	1988	1989	1990	1986	1987	1988	1989	1990		
					% Change 1986-90							
NIES	46,136	57,664	63,232	62,756	60,492	31.1	18,290	23,546	34,880	38,458	40,740	122.7
Hong Kong	8,891	9,854	10,243	9,739	9,492	6.8	3,030	3,983	5,690	6,304	6,840	125.7
Singapore	4,726	6,200	7,996	8,950	9,840	108.2	3,380	4,052	5,770	7,352	8,016	137.1
South Korea	12,730	16,987	20,189	19,742	18,492	45.3	6,355	8,099	11,290	13,478	14,400	126.6
Taiwan	19,790	24,622	24,804	24,325	22,668	14.5	5,525	7,412	12,131	11,323	11,484	107.9
ASEAN (4)	9,452	10,798	12,800	15,728	17,268	82.7	4,974	5,807	7,040	8,630	10,776	116.6
Indonesia	3,312	3,394	3,188	3,542	3,324	.36	946	767	1,056	1,256	1,896	100.5
Malaysia	2,420	2,921	3,712	4,745	5,268	117.7	1,729	1,896	2,140	2,875	3,420	97.8
Philippines	1,973	2,263	2,682	3,064	3,384	71.5	1,363	1,600	1,880	2,207	2,472	81.3
Thailand	1,747	2,220	3,218	4,378	5,292	202.9	936	1,544	1,964	2,292	2,988	219.2
Non-Market	4,771	6,294	8,513	11,988	15,228	219.2	3,137	3,521	5,054	5,818	4,824	53.8
China (PRC)	4,771	6,294	8,513	11,988	15,228	219.2	3,107	3,497	5,039	5,807	4,812	54.9
North Korea	-	-	-	-	-	-	-	-	-	-	-	-
Vietnam	-	-	-	-	-	-	30	24	16	11	.012	-60.0
South Asia	2,609	2,933	3,413	3,838	3,804	45.8	2,366	2,197	3,592	3,599	3,624	53.1
India	2,284	2,528	2,952	3,314	3,192	39.8	1,536	1,464	2,498	2,464	2,484	61.7
Pakistan	325	404	461	523	612	88.2	830	733	1,093	1,135	1,140	37.3

**Appendix C (Continued)**

	Imports					Exports					% Change 1986-90
	1986	1987	1988	1989	1990	1986	1987	1988	1989	1990	
Other Asia	1,099	1,379	1,458	1,691	2,016	468	445	548	521	516	10.3
Oceania	3,718	4,135	4,823	5,273	5,772	6,659	6,526	8,243	9,848	9,972	49.8
Australia	2,632	3,007	3,532	3,900	4,440	5,551	5,495	6,983	8,348	8,544	53.9
New Zealand	983	1,051	1,183	1,231	1,224	881	818	943	1,118	1,140	29.4
Pacific Islands	103	77	108	142	108	227	212	317	382	288	27.1
Total	67,786	83,202	94,238	101,274	104,580	35,894	42,042	59,358	66,874	70,452	96.3
Asia-Pacific											
Reference Comparison											
Japan	81,911	84,575	89,802	93,586	89,652	26,881	28,249	37,732	44,584	48,588	80.8
Canada	68,252	71,084	80,921	88,210	91,368	45,332	59,814	69,233	78,266	82,968	83.0
OECD-Europe	89,130	94,636	99,520	100,817	108,132	61,003	69,090	87,187	99,722	112,224	84.1

NOTE: Numbers may not add due to rounding.

SOURCE: OECD Monthly Statistics on Trade.